

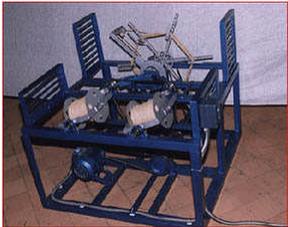
DEVELOPMENT OF MACHINERY

YEAR	ACTIVITIES	ACHIEVEMENTS
<p>1990-91</p>	<p>Developed and operationalised the 4 shaft semi automatic loom in March 1991.</p> <p>The treadle ratt was modified to increase the output of Anjengo/Quilandy/ Vycome type of yarn and Jute blended yarn and achieved an output of 6 kg.,14.2 kg.,9.8 kg and 4 kg.respectively for 8 hours shift. 100 treale ratts were manufactured through M/s Steel Industries, Kerala.</p>  <p>Spinning trials were also conducted on treadle / traditional ratt using blend of sawai grass and coir fibre.</p> <p>8 automatic spinning machines were acquired which were tuned for smooth and efficient operation. Operationalised a 4 shaft semi automatic loom.</p> <p>Semi automatic loom</p>	
<p>1991-92</p>	<p>A single phase electrical motor was fitted to the treadle ratt replacing the pedal for achieving higher output.</p>	<ol style="list-style-type: none"> 1. Motorised treadle ratt was developed. 2 . Extended technical assistance in setting up a mechanised dye house at an export house.

YEAR	ACTIVITIES	ACHIEVEMENTS
1992-93	<p>Designed and fabricated a compact motorised ratt, which occupies very little space, and the yarn spun on this machine has greater length and more even. Designed another model of tiny motorised ratt.</p> <p>Installed two automatic spinning machine at Beypore and Kaniyapuram as part of modernisation in the spinning sector.</p> <p>Completed the design of 2 mtr. power loom.</p> <p>Modifications effected to the automatic spinning machine and achieved an output of 16 kg. yarn of 220/240 runnage in 8 hours work.</p>  <p style="text-align: center;">Motorised Ratt</p>	<ol style="list-style-type: none"> 1. Designed a tiny motorised ratt. 2. Designed and fabricated a compact motorised ratt.
1993-94	<p>The new motorised ratt and automatic spinning machine developed by CCRI were put to intensive spinning trial.</p> <p>The fabrication of 4 m powerloom by MERADO and fabrication of a semi automatic mat loom by CCRI is in progress.</p> <p>A few components of the two metre indigenous powerloom were fabricated.</p> <p>7781 sq. m² of coir needled felt in 1000g/m² density and 6669 sq.m² in 800 g/m² density valued at Rs. 160406/- were produced against the specific orders.</p> 	

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1994-95	<p>With minor modifications it was possible to spin Vycome, Beach & Quilandy varieties of yarn on the same motorised ratt.</p> <p>3 agencies viz. Keltron, Mas Engineering Works and Sixto and Co. were entrusted with the production of motorised ratt.</p> <p>Fabricated components such as clutch pulley assembly with shaft, picking shaft fixing machine, sley race and sley filling gear box with side brackets for 2 metre matting powerloom.</p> 	
1995-96	<p>A new motorised ratt was designed and fabricated for spinning coir yarn of even twist and runnage of 240 m/kg.</p>   <p>Designed and fabricated a prototype crockmeter for assessing the rubbing fastness of shades on coir products.</p> <p>Fabrication and assembling of 2 metre indigenised powerloom was completed and test run carried out by tuning of the loom for weaving coir matting.</p> <p>Drawing of semi automatic loom was issued to a party on realisation of Rs. 5000/-as service charges.</p>	<ol style="list-style-type: none"> 1.Fabrication of 2Mtr. Powerloom was completed and design sold to exporters. 2.Designed and fabricated a new motorised ratt for spinning coir yarn of even twist. 3. Designed and fabricated a prototype crock meter for assessing rubbing fastness of coir. 4.Transfer of technology of coir polymer compo-site boards to M/s. Natura Fibre Tech Ltd., Bangalore

YEAR	ACTIVITIES	ACHIEVEMENTS
<p>1996-97</p>	<p>Designed and fabricated a prototype of compact motorised ratt and put to intensive performance run and yielded an output of 300 m/hr. of soft twisted coir yarn with a runnage of 240 m/kg.</p> <p>Refinement and modifications effected by fabrication of nylon pulleys and new heald frames were fitted to the loom for trouble free operation of the 2mtr. Indigenous power loom.</p> <p>Designed and fabricated a Flexural rigidity tester for measuring the degree of softness of coir fibres.</p> <p>The designs of power loom and semi automatic loom were sold to M/s. Kanti Floor Furnishers.</p> <div data-bbox="1144 357 1474 747" data-label="Image"> </div> <p data-bbox="1186 803 1438 828" style="text-align: center;">FLEXURAL RIGIDITY TESTER</p>	<ol style="list-style-type: none"> 1. Designed and fabricated a prototype of compact motorised ratt. 2. Sale of designs of Powerloom and Semi Automatic Loom to M/s. Kanti Floor Furnishers 3. Designed and fabricated a Flexural rigidity tester for measuring the degree of softness of coir fibre.
	<div data-bbox="262 901 630 1193" data-label="Image"> </div> <p data-bbox="336 1209 493 1242" style="text-align: center;">Power loom</p> <p>Fabricated a compact and improved motorised ratt with only two gears and put to test run.</p> <p>Operationalised the fully indigenous 2 mtr. Powerloom.</p> <p>Designed a tappet for weaving dot matting on the semi-automatic loom.</p>	<ol style="list-style-type: none"> 3. Fabricated a compact and improved motorised ratt with only two gears. 4. Technique to weave 3 mtr. wide geofabric on 1 mtr. wide Jacquard loom.

YEAR	ACTIVITIES	ACHIEVEMENTS
1998-99	 <p style="text-align: center;">Motorised Traditional Ratt</p> <p>Modified 3 sets of traditional ratt used to spin Anjengo, Mangadan and Aratory yarn and fixed with electric motor to increase the productivity and quality. The attachment of motor in the stationary ratt eliminates worker engaged for rotating the wheel. The number of spinners reduced to 2 from 3.</p> <p>A training programme was started to impart training for the maintenance of motorised ratt.</p>	<p>1. Development of Motorised Traditional ratts to spin different varieties of yarn</p>
1999-2000	 <p>2 mtr. Powerloom developed by CCRI was put to intensive production trial. Designed new motorised ratt for spinning single ply yarn.</p> <p>A training programme to train 33 candidates in repair / maintenance of coir processing machineries was launched for a duration of 45 days.</p> <p>3 tonne Bioler was reconditioned and put to regular use A double head spinning machine was developed at CICT, Bangalore.</p> 	<p>2. Double headed spinning machine at Central Institute of Coir Technology, Bangalore.</p>